



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
(800) 451-6027  
www.idem.IN.gov

March 29, 2006

Mr. Larry A. Mackey  
Barnes and Thornburg LLP  
11 South Meridian Street  
Indianapolis, IN 46204-3535

Dear Mr. Mackey:

Re: Veolia Water Indianapolis  
Atrazine Monitoring

Thank you for your February 24, 2006 letter transmitting the Veolia Water Indianapolis *Proposal for an Enhanced Atrazine Monitoring and Control Program for Indianapolis Water*.

IDEM staff have reviewed this report and have some questions and comments which are included in the Attachment to this letter. IDEM requests that Veolia Water voluntarily conduct the increased monitoring and reporting outlined below:

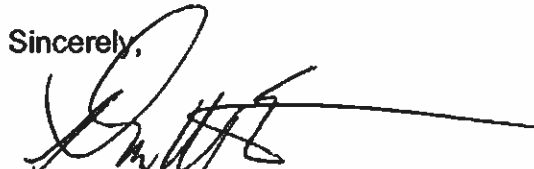
- IDEM believes a specific Atrazine compliance monitoring program is appropriate for each of the surface water treatment plants. During the 1<sup>st</sup> and 4<sup>th</sup> quarters (October – March) Atrazine shall be monitored on a monthly basis. The sample shall be collected on the second Monday of each month. During 2<sup>nd</sup> and 3<sup>rd</sup> quarters (April – September) samples shall be collected twice per week on the following schedule: each Monday between the hours of 9:00 am and 11:00 am, and each Thursday between the hours of 1:00 pm and 3:00 pm.
- Samples collected for compliance purposes may only be invalidated with the prior concurrence of IDEM.
- IDEM also requests that Veolia develop a process for submitting all Atrazine testing for both process and compliance sampling to IDEM for a two-year period. This would include, but is not limited to information about the time, date, location, type, test result and method used. IDEM also requests that the process control monitoring utilize an approved test method as listed at 40 CFR 141.24 for all of these samples.

3/29 forwarded to Mackey & mailed 3/30

I request that Veolia work directly with representatives of IDEM's Drinking Water Branch to address the other comments and requests contained in Attachment A.

Please respond with your client's agreement to conduct this increased Atrazine monitoring program. If you have any questions or comments about this letter please contact me at (317) 232-8611.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Easterly', with a long horizontal line extending to the right.

Thomas W. Easterly, P.E., DEE, QEP  
Commissioner

Enclosure

cc: Carlton Curry, City of Indianapolis, Department of Waterworks  
Frank Deveau, Counsel for City of Indianapolis  
John Bryant, City of Indianapolis, Office of Corporation Counsel  
Linda Runkle, Assistant Commissioner, IDEM Office of Legal Counsel  
Bruno Pigott, Assistant Commissioner, IDEM Office of Water  
Pat Carroll, Branch Chief, IDEM Drinking Water Branch

## **Attachment A**

### **IDEM Technical Comments on Veolia Water February 24, 2006 *Proposal for an Enhanced Atrazine Monitoring and Control Program for Indianapolis Water***

#### **SAMPLING AND REPORTING:**

- IDEM believes a specific Atrazine compliance monitoring program is appropriate for each of the surface water treatment plants. During the 1<sup>st</sup> and 4<sup>th</sup> quarters (October – March) Atrazine shall be monitored on a monthly basis. The sample shall be collected on the second Monday of each month. During 2<sup>nd</sup> and 3<sup>rd</sup> quarters (April – September) samples shall be collected twice per week on the following schedule: each Monday between the hours of 9:00 am and 11:00 am, and each Thursday between the hours of 1:00 pm and 3:00 pm.
- IDEM requests more process control sampling using an approved method. We estimate that it takes approximately thirty-six minutes for a full QC compliance Method 525.2 run. Depending on the QC utilized, eleven to thirteen samples with two of these being matrix spike and matrix spike duplicates can be analyzed in a twelve hour shift. Please reevaluate laboratory sample prioritization, or use an immunoassay test that is an approved method.
- IDEM requests that Veolia develop a process for submitting all Atrazine testing for both process and compliance sampling to IDEM for a two-year period. This would include, but is not limited to information about the time, date, location, type, test result and method used. IDEM also requests that the process control monitoring utilize an approved test method as listed at 40 CFR 141.24 for all of these samples.
- Samples collected for compliance purposes may only be invalidated with the prior concurrence of IDEM.

#### **GENERAL:**

- Please provide a process control chart that shows major process items, capacity, detention times, point of PAC addition, sampling points, etc. for each surface water treatment plant. This chart will help provide IDEM with an understanding of how the Atrazine Control Decision-Making Process and Proposed Enhanced Atrazine Monitoring and Control Program fit together and will be implemented.
- IDEM questions the conclusion that the immunoassay results are generally less than the GCMS results. The data presented does not support this conclusion for the following reasons:
  - No data demonstrating that the correlation is based on the same sample is presented nor is any data presented that the source of the samples is

homogenous. Data presented from the various studies also suffers from the flaw of lack of testing of the same sample. If such data exists, please provide it.

- The immunoassay test is an indiscriminate test and test results on raw and finished water can be due to multiple triazine sources as well as first order daughter products, such as desethyl- and desisopropyl- Atrazine. Comparison of the immunoassay test results to only Atrazine does not account for these factors.
- The AWWA data presented in Appendix C shows mixed results. The immunoassay result is at times less than the GCMS, higher than the GCMS and proportional to the GCMS. When the immunoassay results are higher, the difference ranges from 2 times the GCMS values to almost an order of magnitude higher. The field samples again suffer from the issue of comparing different samples. Given the inconsistency of performance of the VWI samples one cannot state that the immunoassay discrepancies are due to a bias in the immunoassay technique. Differences in samples do not appear to have been eliminated.
- The importance of working with various stakeholders in the watersheds to reduce raw water Atrazine levels is discussed in the plan. IDEM believes this is a key element in the long-term control of Atrazine. Please provide greater detail regarding the steps VWI will take to promote source water protection in the watersheds, especially the non Eagle Creek watersheds.

#### **Atrazine Control Decision-Making Process**

- Please provide a description of the decision making process you use for determining when blending, PAC addition or some combination of the two is used to address elevated levels of Atrazine in the raw water.
- Please provide the decision making criteria used to determine what the actual dose of PAC will be, factoring in such variables as the type of PAC used, the amount of blended water used and the raw water Atrazine level.